

BookletChart™

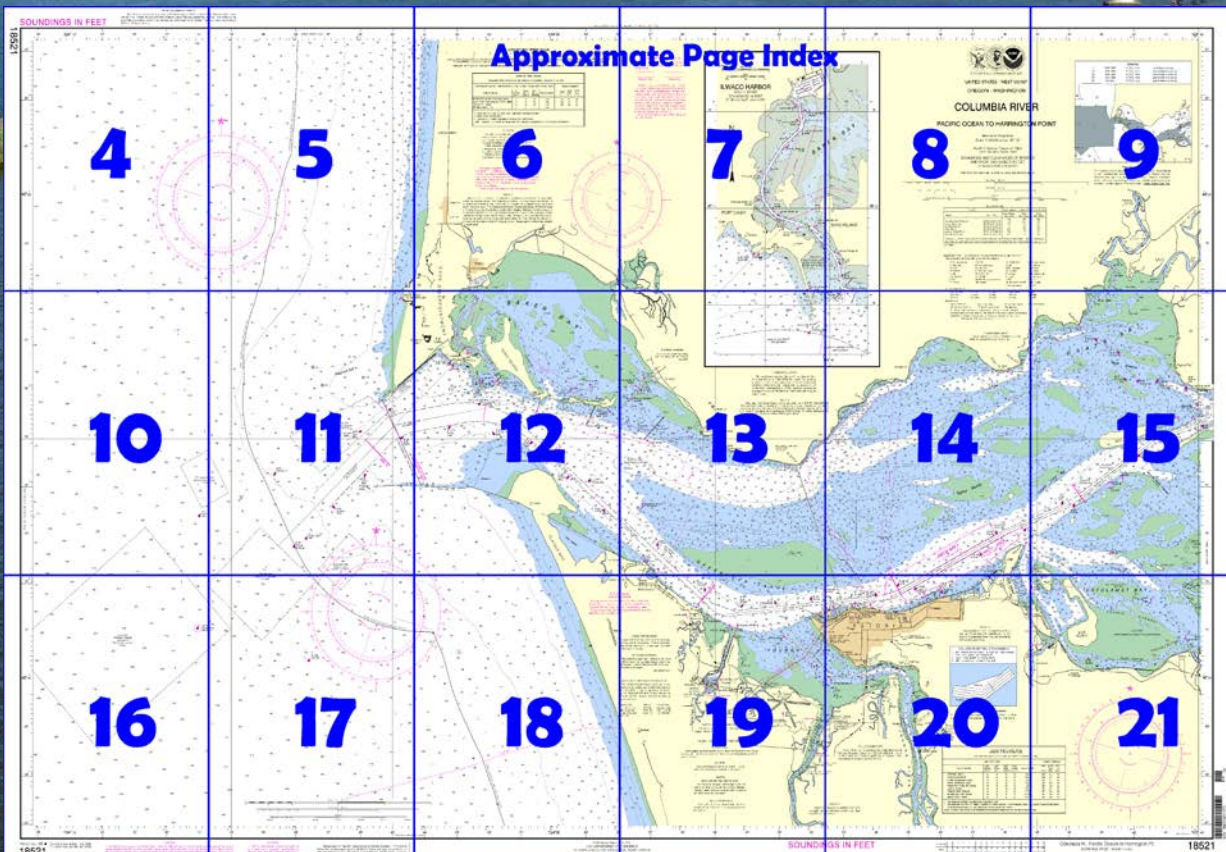


Columbia River – Pacific Ocean to Harrington Point NOAA Chart 18521

***A reduced-scale NOAA nautical chart for small boaters
When possible, use the full-size NOAA chart for navigation.***



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Coast Survey
www.NauticalCharts.NOAA.gov
888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart™?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

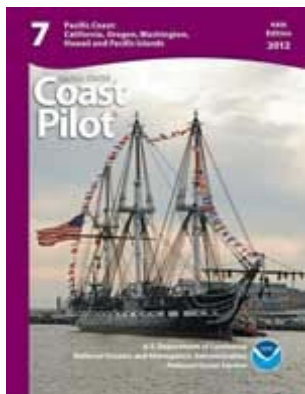
Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at <http://www.NauticalCharts.NOAA.gov>.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at <http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=18521>.



(Selected Excerpts from Coast Pilot) Reports of Oil Spills and Vessel

Emergencies.—All vessels must report oil spills or potential oil spills to both Washington State (800-258-5990) and National Response Center (800-424-8802).

Washington State Vessel Inspections.—The Washington State Department of Ecology regulates cargo and passenger vessels and tank vessels operating in Washington waters. (See Coast Pilot 7, chapter 10.)

Oil Transfer Requirements.—Safe

bunkering procedures must be followed during fueling operations. For vessels 300 gross tons or greater, Washington State Ecology inspectors

may conduct **inspections** of these regulated oil transfers on vessels receiving fuel within Washington waters. Details can be found in state regulations at Washington Administrative Code (WAC) 317-40.

Tank vessels delivering oil in bulk to a non-recreational vessel or facility within Washington waters must meet state oil transfer requirements. They may also be subject to Washington State **oil transfer inspections** for these regulated oil transfers. Details can be found in WAC 173-184. For a transfer of over 100 gallons of bulk oil to a facility or non-recreational vessel, the delivering vessel must submit an Advance Notice of Transfer (ANT) report. The ANT must be submitted 24 hours prior to the transfer for facilities or within the timeframe required by local USCG Captain of the Port. The ANT report can be made online (<https://secureaccess.wa.gov/ecy/ants>), by fax (360-407-7288 or 800-664-9184), or by e-mail (Oil-TransferNotifications@ecy.wa.gov).

Contingency Plan Requirements.—Tank vessels and cargo and passenger ships 300 gross tons or larger transiting Washington waters must either have a Washington State Department of Ecology approved **oil spill contingency plan** or be a member of a non-profit corporation that provides oil spill response capabilities consistent with their Washington State approved contingency plan. Additional information is available at <http://www.ecy.wa.gov/programs/spills/spills.html>.

Caution.—The volcanic eruptions of Mount Saint Helens in mid-1980 caused extensive flooding with resulting heavy siltation in the lower Columbia River. Mariners are advised to use caution in the Columbia River and its tributaries. Mariners should contact any hopper dredges, dredge barges and pipeline dredges encountered on VHF-FM channel 13 to make passing arrangements; navigate with due caution.

Caution.—The Columbia River bar is reported to be very dangerous because of sudden and unpredictable changes in the currents often accompanied by breakers.

In the entrance the currents are variable, and at times reach a velocity of over 5 knots on the ebb; on the flood they seldom exceed 4 knots. The current velocity is 3.5 knots, but this tidal current is always modified both as to velocity and time of slack water by the river discharge.

Free floating logs and submerged deadheads or sinkers are a constant source of danger in the Columbia and Willamette Rivers. The danger is increased during spring freshets. **Deadheads** or **sinkers** are logs which have become adrift from rafts or booms.

Pilotage, Columbia River and Bar.—Pilotage across the Columbia River bar and up or down the river is compulsory for U.S. vessels enrolled or sailing under Registry and all foreign vessels, except foreign recreational or fishing vessels not more than 100 feet in length or 250 gross tons. Embarking and disembarking Columbia River Bar Pilots is accomplished by helicopter or boat. All vessels are required to contact Columbia River Bar Pilots via VHF channel 9, 13, or 16 at least two hours before their ETA. The call sign for the Bar Pilot office is KOK-360. At that time vessels will be advised of pilot boarding instructions. The primary method of pilot boarding is by helicopter. Vessels should not approach the CR buoy until advised by a pilot. While awaiting a pilot boarding by helicopter or pilot boat, vessels should stay within a marshaling area approximately 5 miles west of the CR buoy.

HELICOPTER TRANSFER PROCEDURES (see Coast Pilot 7, page 436)

When the fixed amber light atop the pilot office at Astoria is exhibited, it will inform outward bound vessels that desire a bar pilot that the bar is not passable and that the vessel should remain in port.

U.S. Coast Guard Rescue Coordination Center **24 hour Regional Contact for Emergencies**

RCC Seattle

Commander
13th CG District
Seattle, WA

(206) 220-7001

Navigation Managers Area of Responsibility



NOAA's navigation managers serve as ambassadors to the maritime community.

They help identify navigational challenges facing professional and recreational mariners, and provide NOAA resources and information for safe navigation. For additional information, please visit nauticalcharts.noaa.gov/service/navmanagers

To make suggestions or ask questions online, go to nauticalcharts.noaa.gov/inquiry.

To report a chart discrepancy, please use ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx.

Lateral System As Seen Entering From Seaward

on navigable waters except Western Rivers

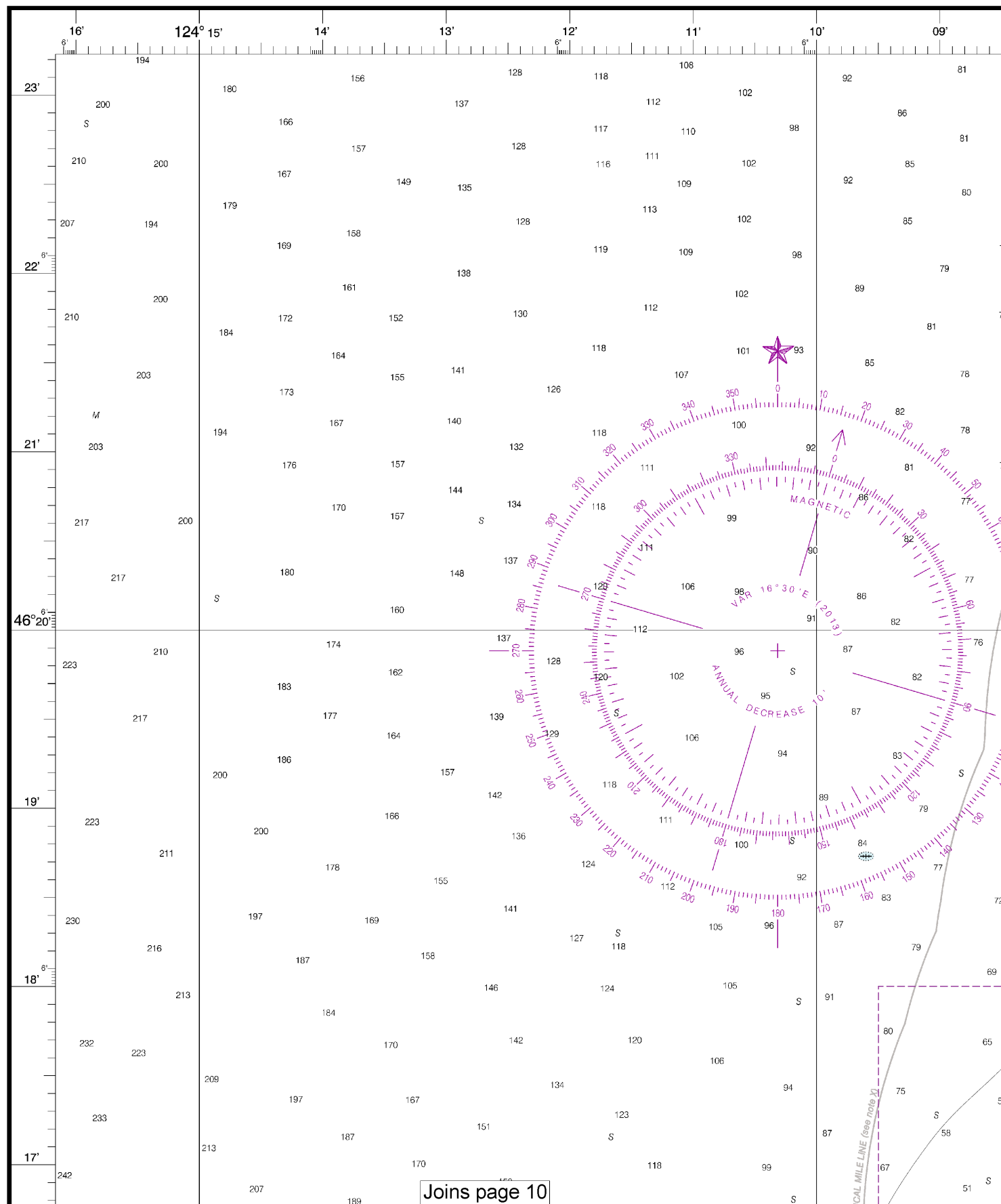


For more information on aids to navigation, including those on Western Rivers, please consult the latest USCG Light List for your area.

These volumes are available online at <http://www.navcen.uscg.gov>

SOUNDINGS IN FEET

18521



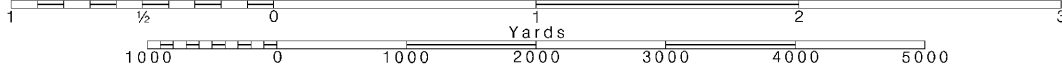
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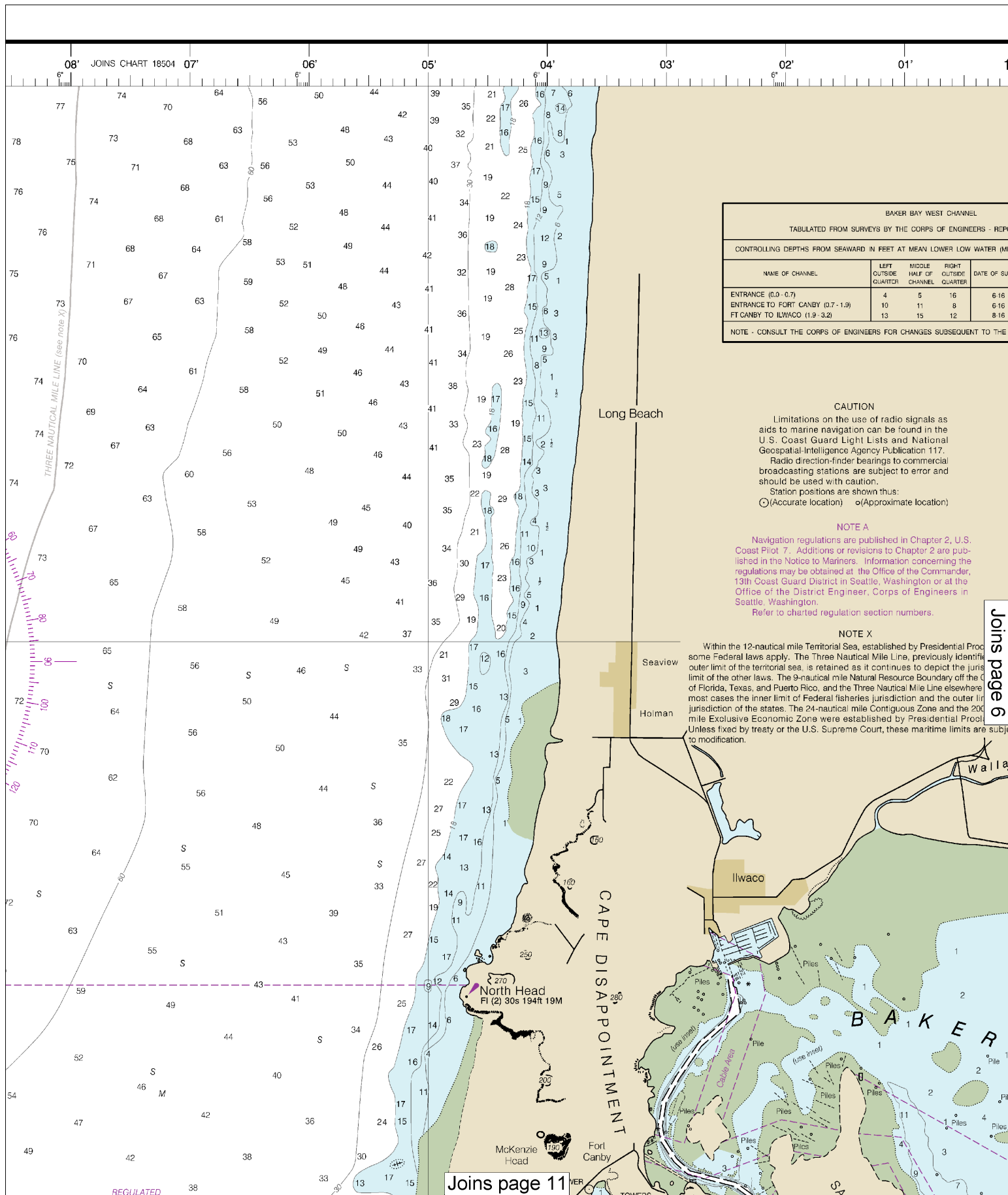
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

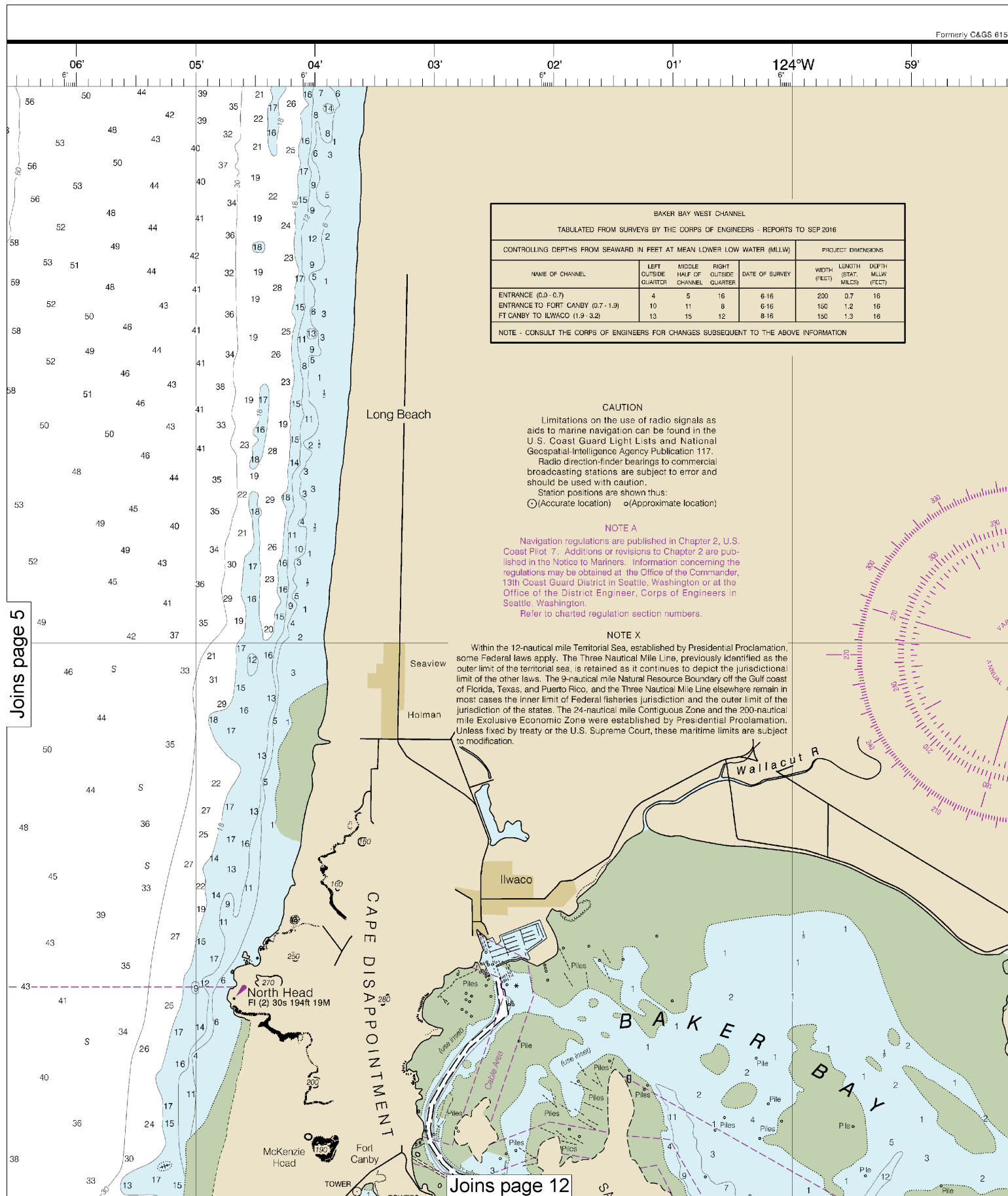
SCALE 1:40,000
Nautical Miles

See Note on page 5.





This BookletChart was reduced to 75% of the original chart scale. The new scale is 1:53333. Barscales have also been reduced and are accurate when used to measure distances in this BookletChart.

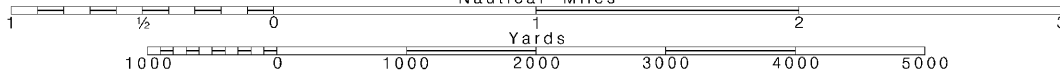


Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

See Note on page 5.



See Note on page 5.



THE NATION'S CHARTMAKER SINCE 1807

UNITED STATES - WEST COAST

OREGON - WASHINGTON

COLUMBIA RIVER

PACIFIC OCEAN TO HARRINGTON POINT

Mercator Projection
Scale 1:40,000 at Lat 46° 13'

North American Datum of 1983
(World Geodetic System 1984)

SOUNDINGS AND CLEARANCES OF BRIDGES
AND OVERHEAD CABLES IN FEET
AT MEAN LOWER LOW WATER

Additional information can be obtained at nauticalcharts.noaa.gov.

SCALE 1:40,000

Nautical Miles

Statute Miles

Yards

TIDAL INFORMATION

PLACE	NAME (LAT/LONG)	Height referred to datum of soundings (MLLW)		
		Mean Higher High Water	Mean High Water	Mean Low Water
Columbia River Entrance	(46°16'N/124°04'W)	7.5	6.8	1.2
Ilwaco, Baker Bay	(46°16'N/124°02'W)	7.6	7.0	1.0
Harrington Point	(46°16'N/123°39'W)	7.7	7.0	0.9
Point Adams	(46°12'N/123°37'W)	8.3	7.6	1.2
Astoria, Tongue Point	(46°13'N/123°46'W)	8.6	7.9	1.2
Chinook, Baker Bay	(46°16'N/123°57'W)	8.1	7.4	1.3

Dashes (---) located in datum columns indicate unavailable datum values for a tide station. Real-time water levels, tide predictions, and tidal current predictions are available on the Internet from <http://tidesandcurrents.noaa.gov> (Sep 2013).

ABBREVIATIONS

(For complete list of Symbols and Abbreviations, see Chart No. 1.)

Aids to Navigation (lights are white unless otherwise indicated):

AERO aeronautical	G green	Mo morse code	R TR radio tower
Al alternating	IQ interrupted quick	N nun	Rot rotating
B black	Is isophase	OBSC obscured	s seconds
Bn beacon	LT HO lighthouse	OC occulting	SEC sector
C can	M nautical mile	Or orange	St M statute miles
D/A daphone	m minutes	Q quick	VQ very quick
F fixed	MICRO TR microwave tower	R red	W white
F flashing	Mkr marker	Ra Ref radar reflector	WHIS whistle
		R Bn radiobeacon	Y yellow

Bottom characteristics:

Blds boulders	Co coral	gy gray	Oys oysters	so soft
bk broken	G gravel	h hard	Rk rock	Sh shells
Cy clay	Gr grass	M mud	S sand	sy sticky

Miscellaneous:

AUTH authorized	Obstn obstruction	PD position doubtful	Subm submerged
ED existence doubtful	PA position approximate	Rep reported	

(2) Wreck, rock, obstruction, or shoal swept clear to the depth indicated.

(2) Rocks that cover and uncover, with heights in feet above datum of soundings.

COLREGS: International Regulations for Preventing Collisions at Sea, 1972.

Demarcation lines are shown thus: ---

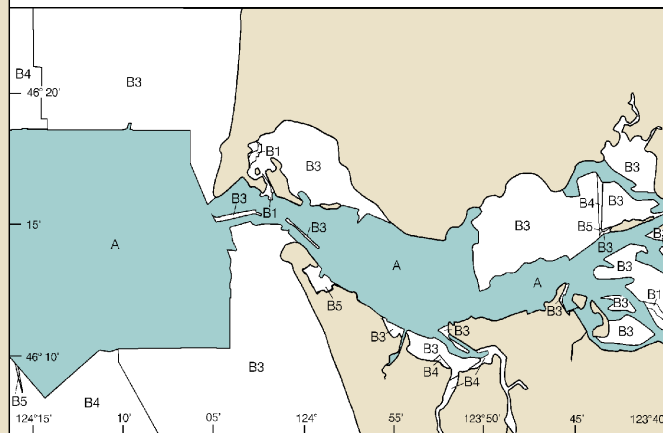
CHANGEABLE AREAS

Areas outside of the Columbia River channel
limits are subject to frequent change.

Joins page 15

SOURCE

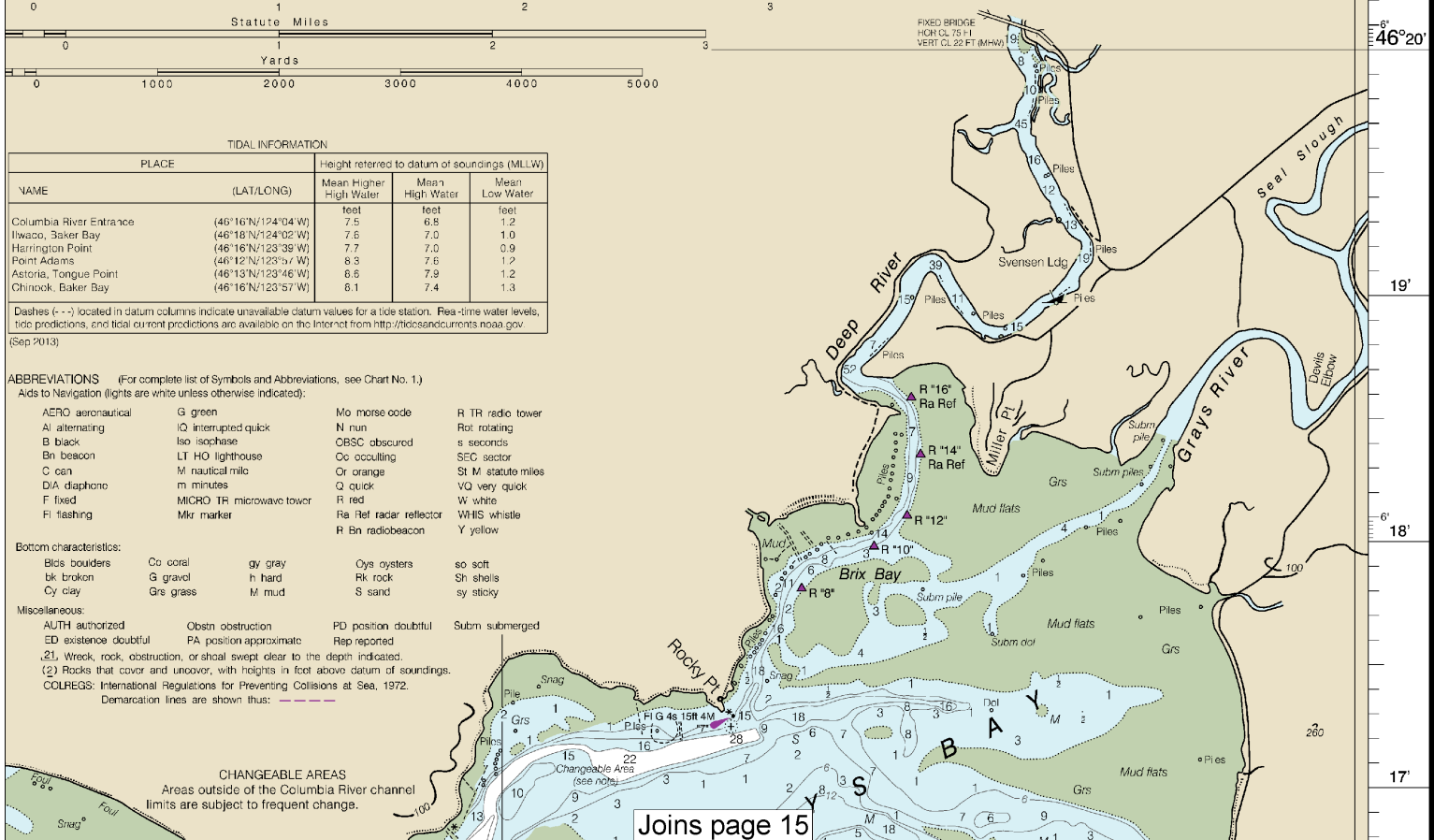
A	1990-2011	NOS Surveys	full bottom coverage
B1	1990-2008	NOS Surveys	partial bottom coverage
B3	1940-1969	NOS Surveys	partial bottom coverage
B4	1900-1939	NOS Surveys	partial bottom coverage
B5	Pre-1900	NOS Surveys	partial bottom coverage

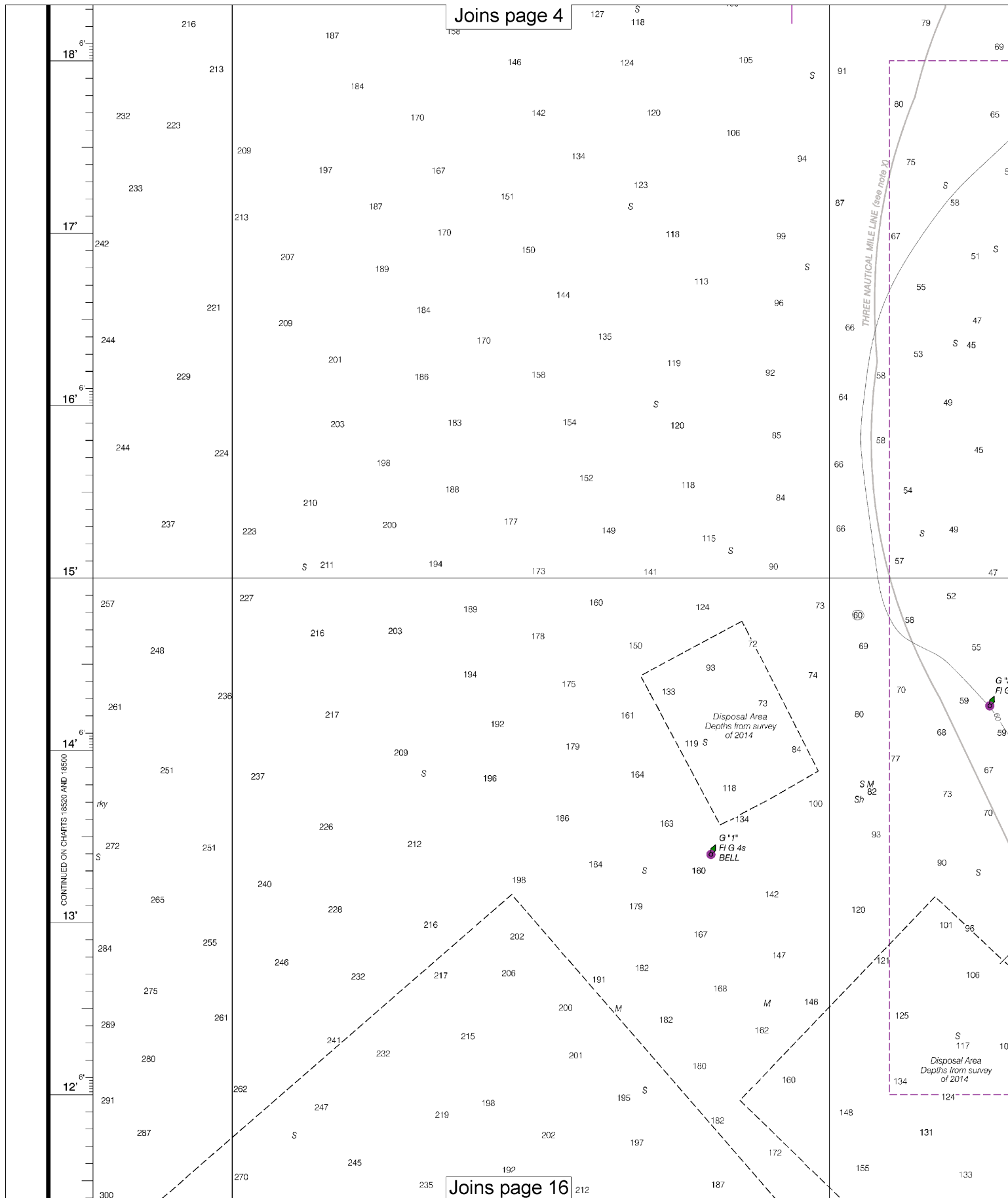


SOURCE DIAGRAM

The outlined areas represent the limits of the most recent hydrographic survey information that has been evaluated for charting. Surveys have been banded in this diagram by date and type of survey. Channels maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, United States Coast Pilot.

FIXED BRIDGE
HORIZ CL 75 FT
VERT CL 22 FT (MHW)





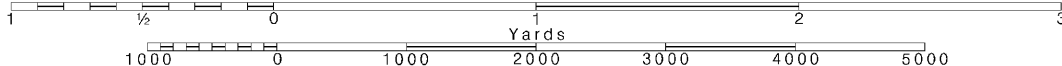
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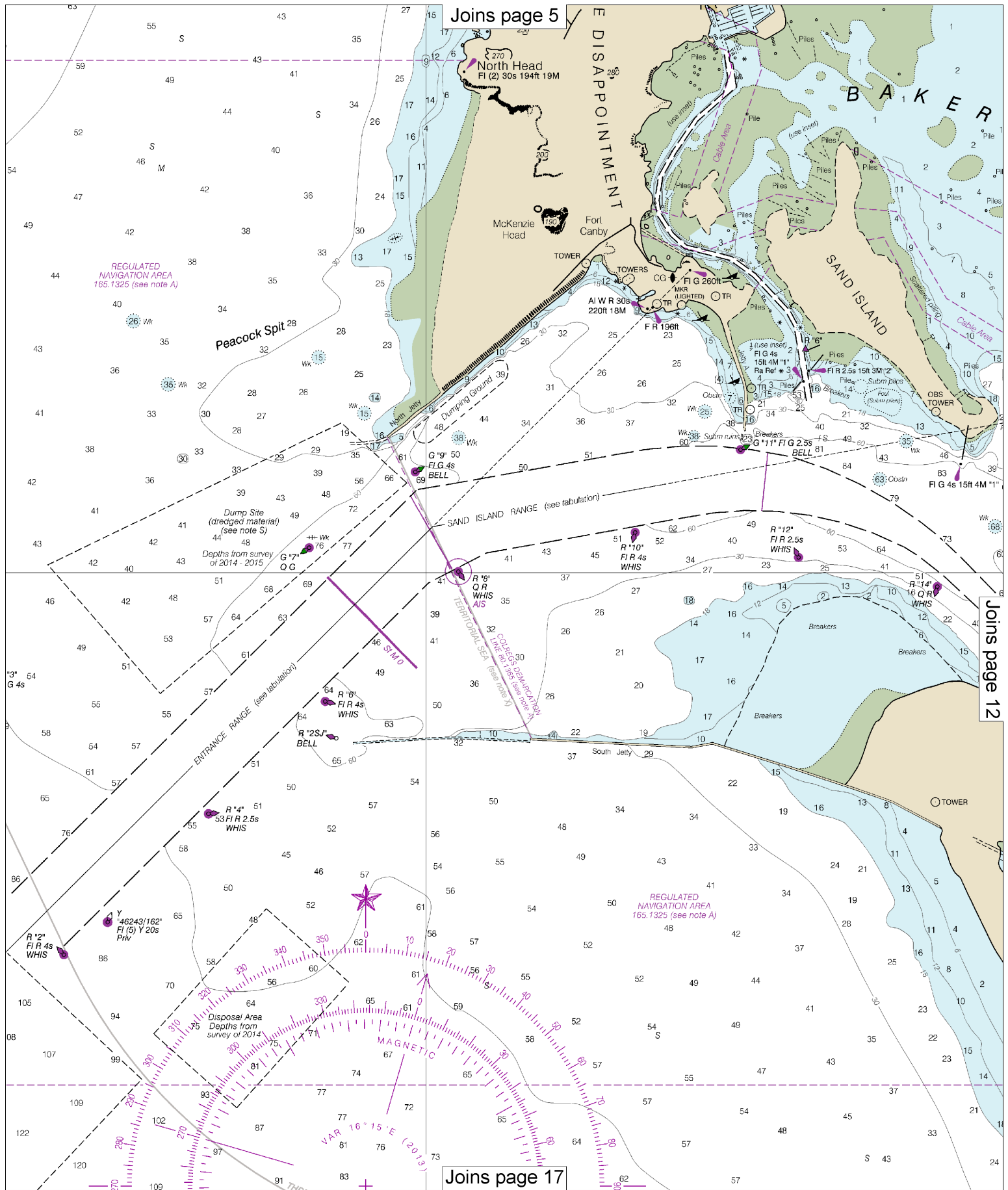
Note: Chart grid
lines are aligned
with true north.

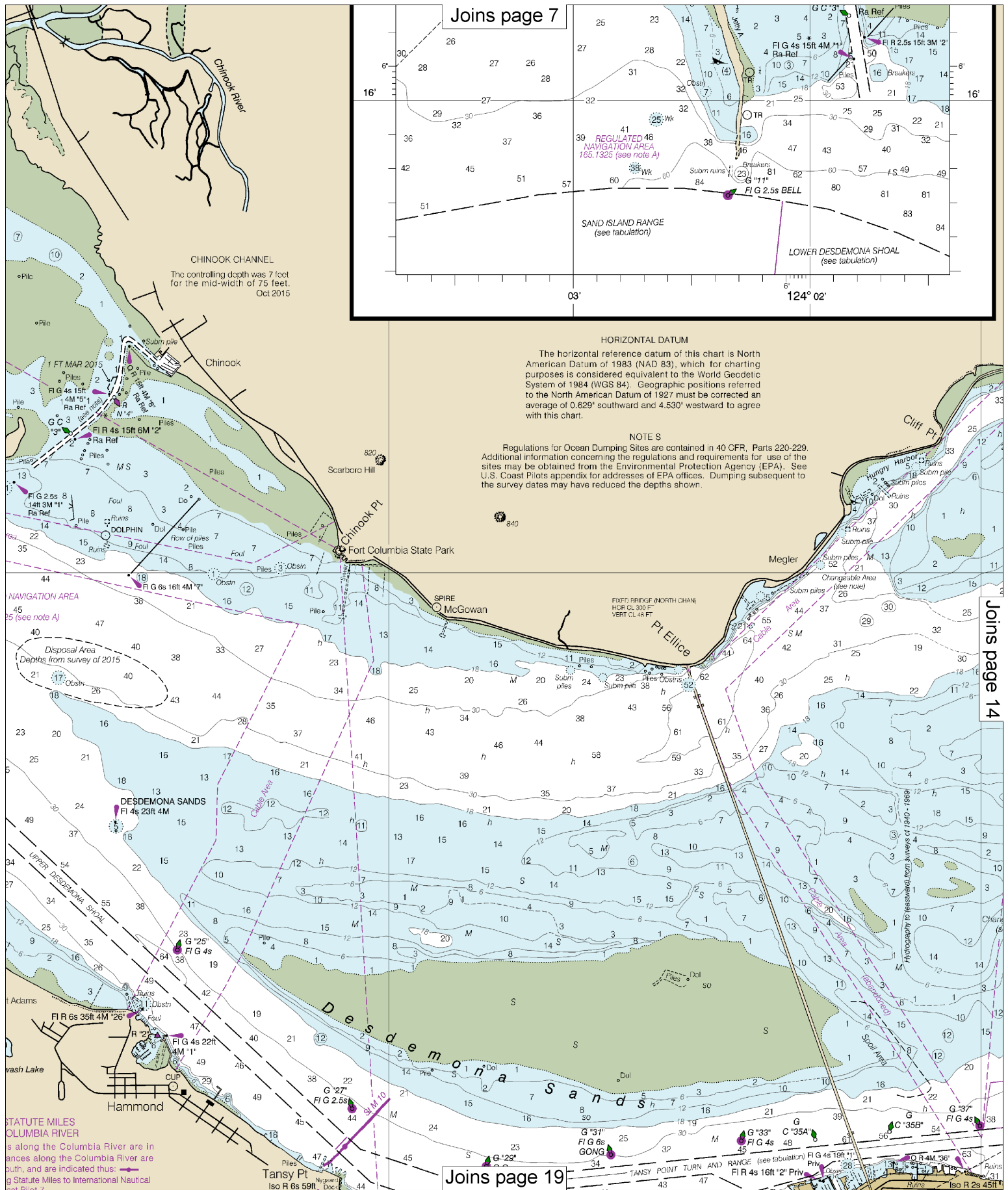
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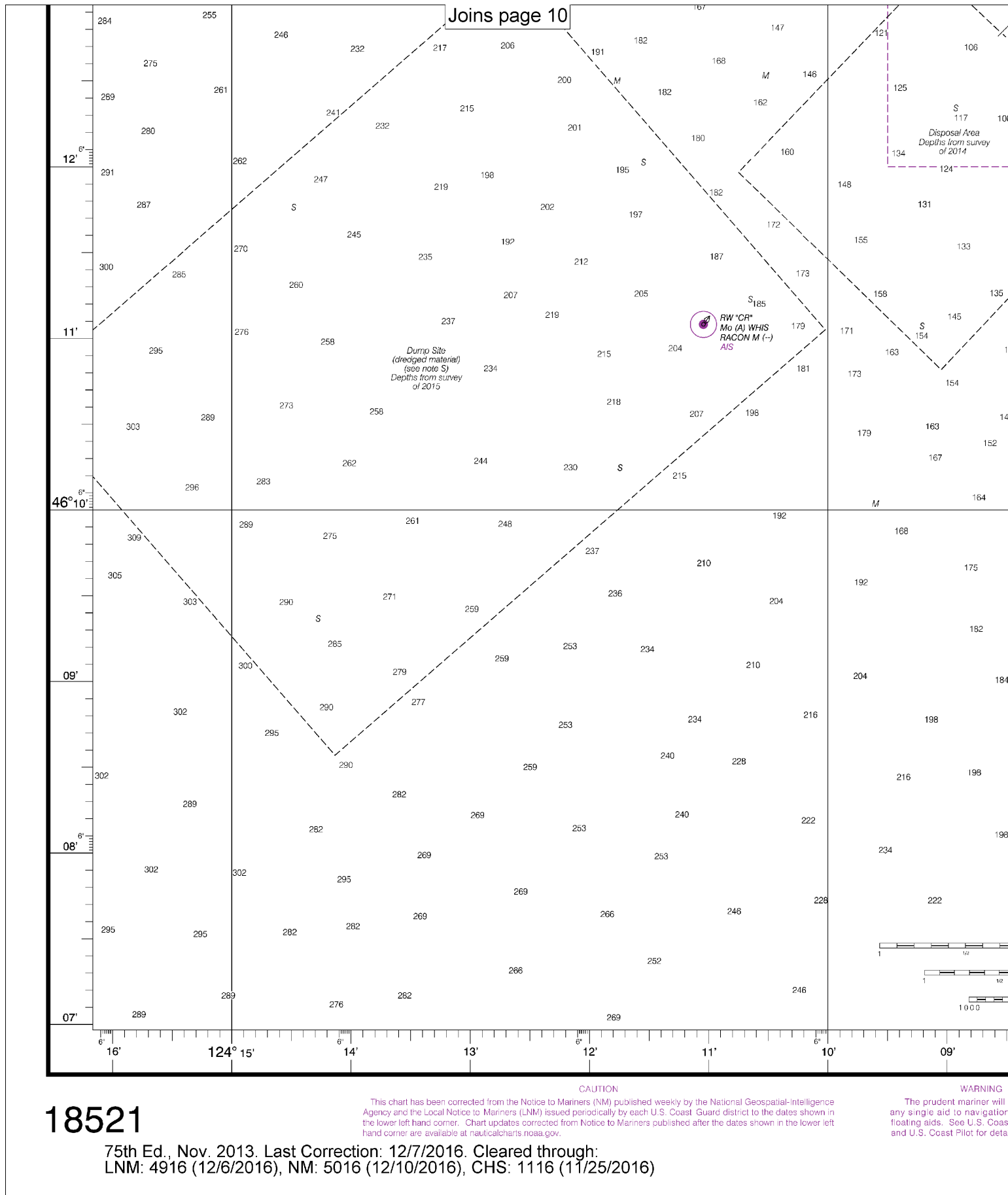
SCALE 1:40,000
Nautical Miles

See Note on page 5.









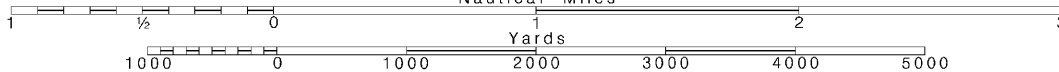
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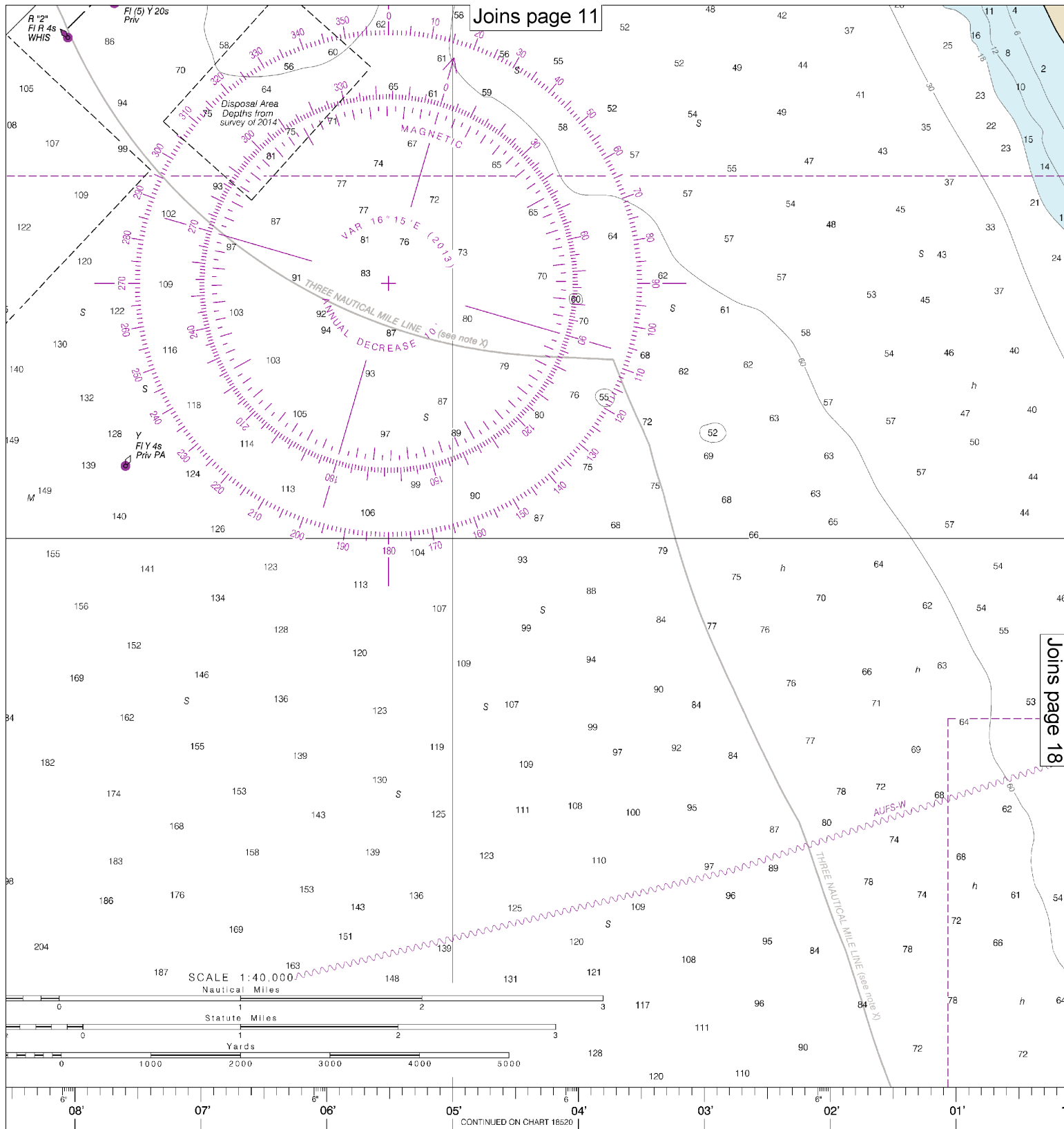
Note: Chart grid lines are aligned with true north.

Printed at reduced scale.

SCALE 1:40,000
Nautical Miles

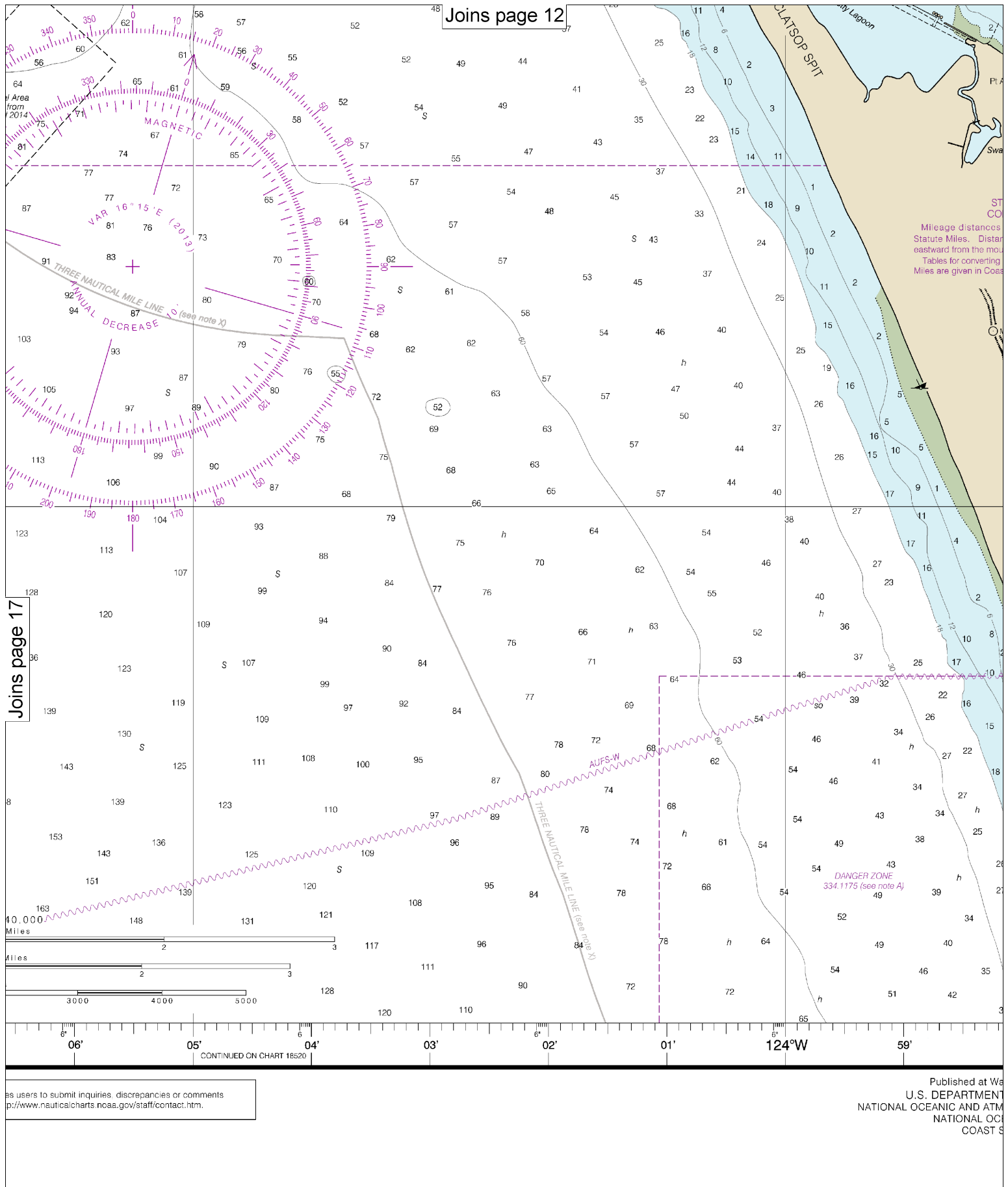
See Note on page 5.





If not rely solely on
on, particularly on
st Guard Light List
ails.

NOAA encourages users to submit inquiries, discrepancies or comments
about this chart at <http://www.nauticalcharts.noaa.gov/staff/contact.htm>.



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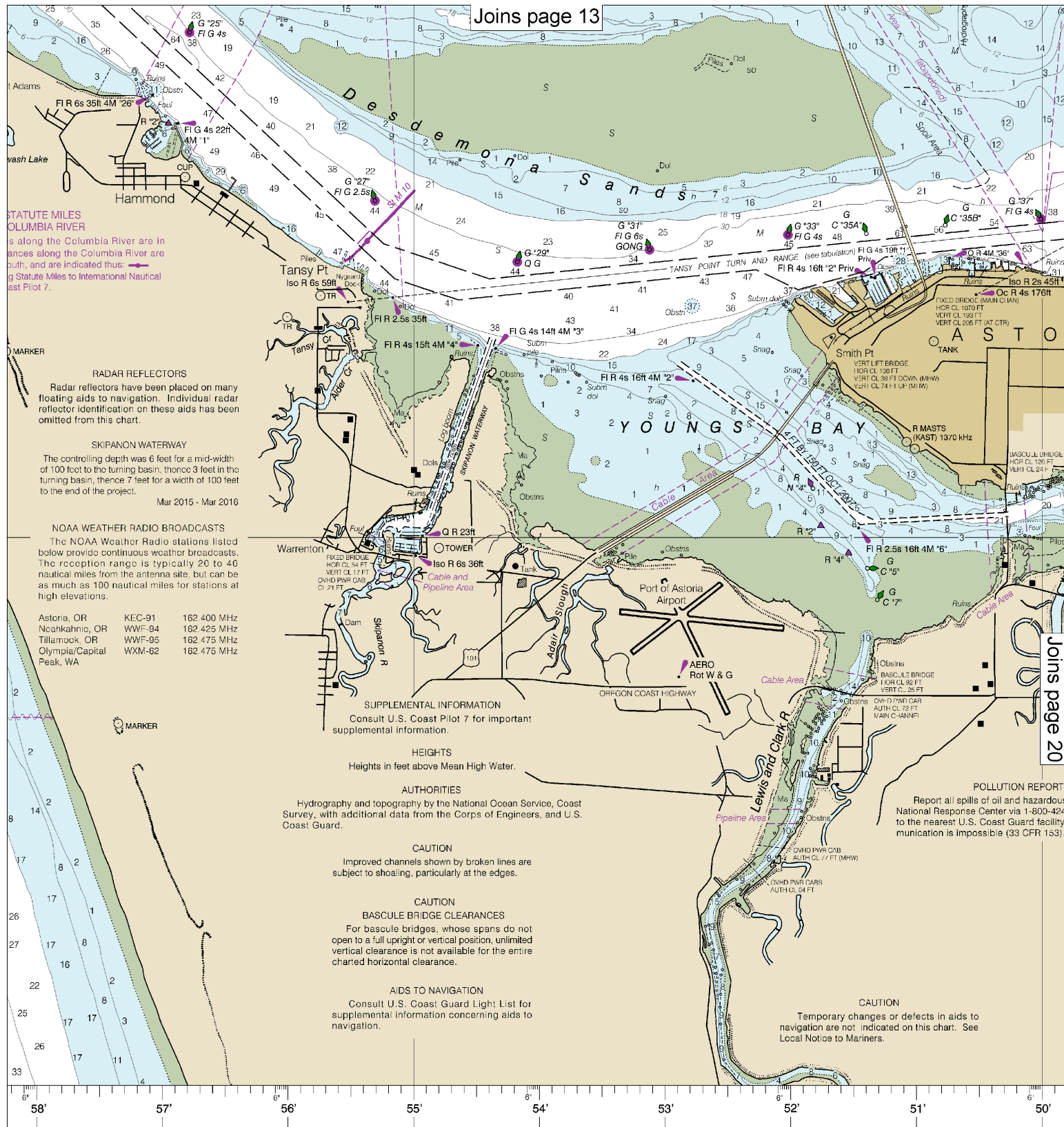
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Nautical Miles

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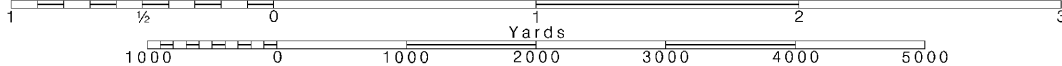




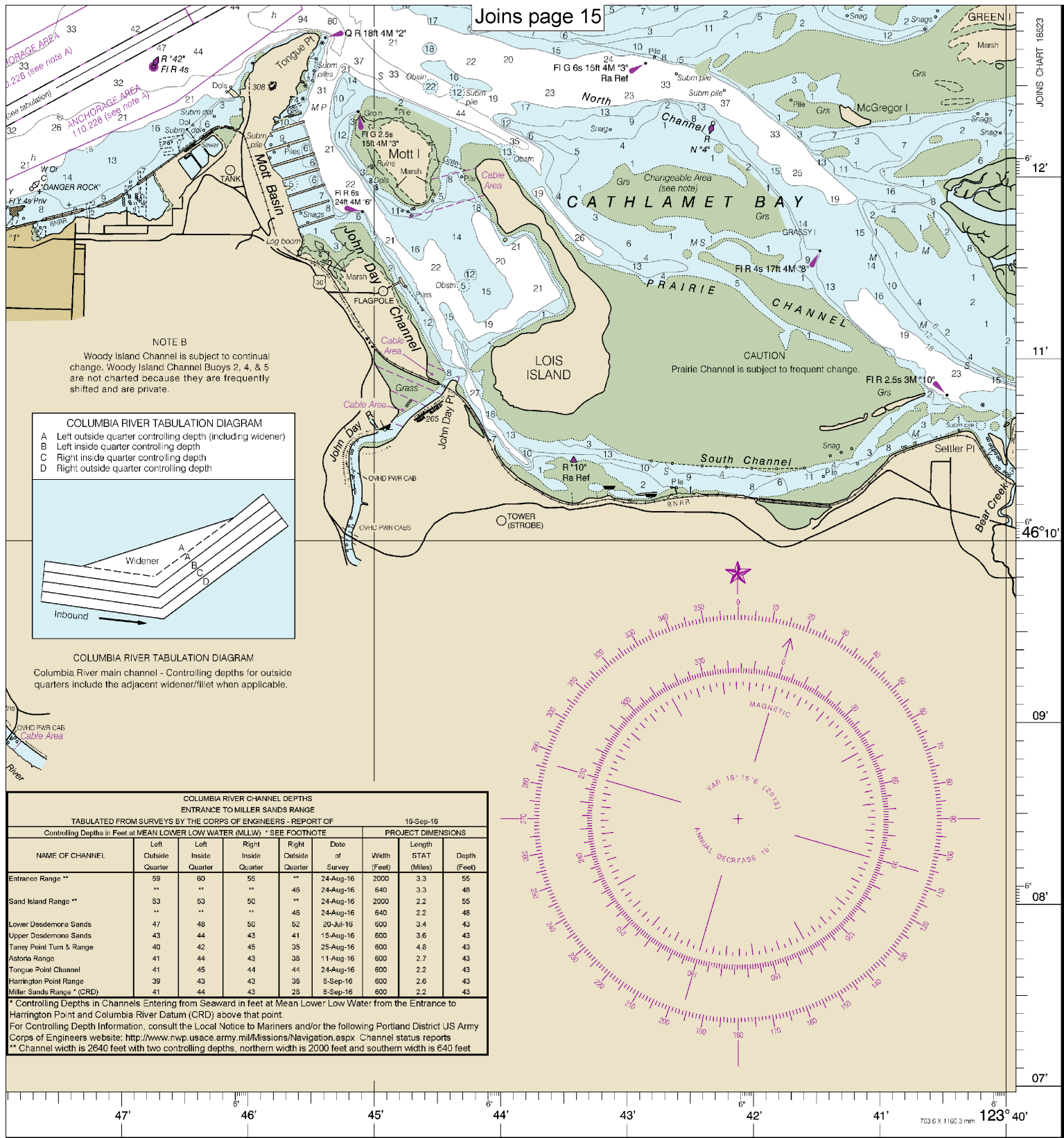


Printed at reduced scale.

See Note on page 5.



Joins page 15



Columbia R., Pacific Ocean to Harrington Pt.
SOUNDINGS IN FEET - SCALE 1:40,000

18521



VHF Marine Radio channels for use on the waterways:

Channel 6 – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here.

Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

Getting and Giving Help — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

<http://www.nws.noaa.gov/nwr/>

Distress Call Procedures

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of Emergency; Number of People on Board.
- Release transmit button.
- Wait for 10 seconds — If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!

Quick References

Nautical chart related products and information	— http://www.nauticalcharts.noaa.gov
Interactive chart catalog	— http://www.charts.noaa.gov/InteractiveCatalog/nrnc.shtml
Report a chart discrepancy	— http://ocsddata.ncd.noaa.gov/idrs/discrepancy.aspx
Chart and chart related inquiries and comments	— http://ocsddata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs
Chart updates (LNM and NM corrections)	— http://www.nauticalcharts.noaa.gov/mcd/updates/LNM_NM.html
Coast Pilot online	— http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm
Tides and Currents	— http://tidesandcurrents.noaa.gov
Marine Forecasts	— http://www.nws.noaa.gov/om/marine/home.htm
National Data Buoy Center	— http://www.ndbc.noaa.gov/
NowCoast web portal for coastal conditions	— http://www.nowcoast.noaa.gov/
National Weather Service	— http://www.weather.gov/
National Hurricane Center	— http://www.nhc.noaa.gov/
Pacific Tsunami Warning Center	— http://ptwc.weather.gov/
Contact Us	— http://www.nauticalcharts.noaa.gov/staff/contact.htm



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This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.